Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

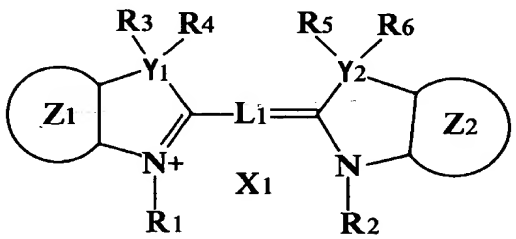
1. (Currently Amended) An optical recording medium having a recording layer to which information is recorded by using a laser with an oscillation wavelength of about ~~450~~ 405 nm ~~or shorter,~~ :

in said recording layer an organic dye compound which shows an absorption maximum at a wavelength longer than the oscillation wavelength of said laser but absorbs said laser in a level sufficient to record information in said recording layer,

said optical recording medium having a recording capacity of over 15 GB per one side when formed into a disk 12 cm in diameter.

2. (Previously Presented) The optical recording medium of claim 1, wherein said organic dye compound is represented by Formula 1;

Formula 1:

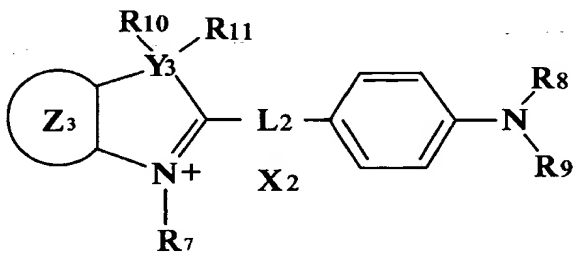


wherein in Formula 1, Z_1 and Z_2 denote the same or different optionally substituted aromatic rings; Y_1 and Y_2 independently denote carbon atoms or hetero atoms; R_1 and R_2 denote optionally substituted aliphatic hydrocarbon groups; R_3 to R_6 independently denote hydrogen atoms or compatible substituents, and when Y_1 and Y_2 are hetero atoms, the whole or a part of R_3 to R_6 does not exist; L_1 denotes a polymethine chain which may have a substituent and/or a cyclic group; and

X_1 denotes a compatible counter-ion selected from the group consisting of nitrate ion, phosphate ion, perchlorate ion, periodate ion, hexafluoroantimonate ion, haexafluorostannate ion, , tetrafluoroborate ion, thiocyante ion, bensenesulfonate ion, naphthalenesulfonate ion, benzoate ion, alkylcarbonate ion, trihaloalkylcarbonate ion, alkylsulfonateion, trihaloalkylsulfonate ion, nicotinate ion, trimethylammonium ion, and triethylammonium ion.

3. (Previously Presented) The optical recording medium of claim 1, wherein said organic dye compound is represented by Formula 2;

Formula 2:

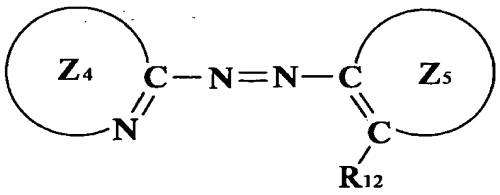


wherein in Formula 2, Z_3 denotes an optionally substituted aromatic ring; Y_3 denotes a carbon atom or a hetero atom; R_7 to R_9 denote the same or different optionally substituted aliphatic hydrocarbon groups; R_{10} and R_{11} independently denote hydrogen atoms or compatible substituents, and when Y_3 is a hetero atom, R_{10} and/or R_{11} do not exist; L_2 denotes a polymethine chain which may have a substituent and/or a cyclic group; and

X_2 denotes a compatible counter-ion selected from the group consisting of nitrate ion, phosphate ion, perchlorate ion, periodate ion, hexafluoroantimonate ion, hexafluorostannateion, tetrafluoroborate ion, thiocyanate ion, benzenesulfonate ion, naphthalenesulfonate ion, benoate ion, alkylcarbonate ion, trihaloalkylcarbonate ion, alkylsulfonate ion, trihaloalkylsulfonate ion, nicotinate ion, trimethylammonium ion, and triethylammonium ion.

4. (Previously Presented) The optical recording medium of claim 1, wherein said organic dye compound is a metal complex of an azo compound represented by Formula 3;

Formula 3:



wherein in Formula 3, Z_4 and Z_5 denote the same or different optionally substituted aromatic hydrocarbon groups or heterocycles; and R_{12} denotes an acidic group.

5. (Previously Presented) The optical recording medium of claim 1, which uses a laser beam with a wavelength of around 405 nm as a writing light.

6. (Canceled)

7. (Original) The optical recording medium of claim 1, which uses, in said recording layer, one or more other dye compounds sensitive to visible light and/or a compatible light-resistant improver(s) in combination.

8. (Currently Amended) In an optical recording method to record information by using an optical recording medium comprising a substrate and a recording layer provided on said substrate by using an organic dye compound and irradiating said recording layer with a writing light to act on said organic dye compound to form a pit on said substrate, the improvement comprising

using, as a main organic dye compound for forming pits, an organic dye compound which has an absorption maximum with a wavelength less than 850 nm and substantially absorbs a writing light with a wavelength shorter than the absorption maximum of said organic dye compound, and

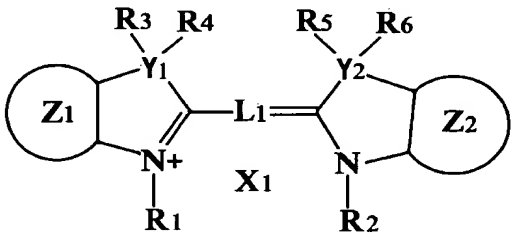
irradiating a recording layer on a substrate with the writing light to form a pit on said substrate,

wherein said writing light has a wavelength of about ~~450~~ 405 nm, ~~or shorter~~

said optical recording medium having a capacity of over 15 GB per one side when formed into a disk 12 cm in diameter.

9. (Previously Presented) The method of claim 8, wherein said organic dye compound is represented by Formula 1;

Formula 1:

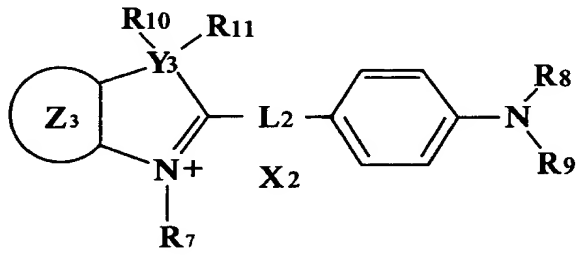


wherein in Formula 1, Z_1 and Z_2 denote the same or different optionally substituted aromatic rings; Y_1 and Y_2 independently denote carbon atoms or hetero atoms; R_1 and R_2 denote optionally substituted aliphatic hydrocarbon groups; R_3 to R_6 independently denote hydrogen atoms or compatible substituents, and when Y_1 and Y_2 are hetero atoms, the whole or a part of R_3 to R_6 does not exist; L_1 denotes a polymethine chain which may have a substituent and/or a cyclic group; and

X_1 denotes a compatible counter-ion selected from the group consisting of nitrate ion, phosphate ion, perchlorate ion, periodate ion, hexafluoroantimonate ion, hexafluorostannate ion, tetrafluoroborate ion, thiocyanate ion, benzenesolfonate ion,

naphthalenesulfonate ion, benzoate ion, alkylcarbonate ion, trihaloalkylcarbonate ion, alkylsulfonate ion, trihaloalkylsulfonate ion, nicotinate ion, trimethylammonium ion, and triethylammonium ion.

10. (Previously Presented) The method of claim 8, wherein said organic dye compound is represented by Formula 2; Formula 2:



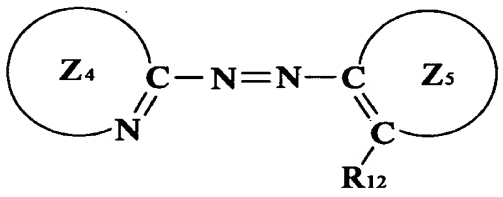
wherein in Formula 2, Z_3 denotes an optionally substituted aromatic ring; Y_3 denotes a carbon atom or a hetero atom; R_7 to R_9 denote the same or different optionally substituted aliphatic hydrocarbon groups; R_{10} and R_{11} independently denote hydrogen atoms or compatible substituents, and when Y_3 is a hetero atom, R_{10} and/or R_{11} do not exist; L_2 denotes a polymethine chain which may have a substituent and/or a cyclic group; and

X_2 denotes a compatible counter-ion selected from the group consisting of nitrate ion, phosphate ion, perchlorate ion, periodate ion, hexafluoroantimonate ion, hexafluorostannate ion, tetrafluoroborate ion, thiocyanate ion, benzenesolfonate ion, naphthalenesulfonate ion, benzoate ion, alkylcarbonate ion,

trihaloalkylcarbonate ion, alkylsulfonate ion, trihaloalkylsulfonate ion, nicotinate ion, trimethylammonium ion, and triethylammonium ion.

11. (Previously Presented) The method of claim 8, wherein said organic dye compound is a metal complex of an azo compound represented by Formula 3;

Formula 3:



wherein in Formula 3, Z_4 and Z_5 denote the same or different optionally substituted aromatic hydrocarbon groups or heterocycles; and R_{12} denotes an acidic group.

12. (Previously Presented) The method of claim 8, which uses a laser beam with a wavelength of around 405 nm as a writing light.

13. (Canceled)

14. (Previously Presented) The method of claim 8, which uses, in said recording layer, one or more other dye compounds sensitive to visible light and/or a compatible light-resistant improver(s) in combination.

Claims 15 - 18. (Canceled)